

Minnesota Value of Solar Tariff: Environmental Value

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Statutory Language

Subd. 10. Alternative tariff; compensation for resource value. . . .

(f) The distributed solar value methodology established by the department must, at a minimum, account for the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value.

The department may, based on known and measurable evidence of the cost or benefit of solar operation to the utility, incorporate other values into the methodology, including credit for locally manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, or other factors.

Accounting for Environmental Impacts

- Damage Function
- Control Function
- Compliance costs
 - Costs of future regulation
 - Mitigation Costs
- Willingness to Pay

Related MN Regulatory Activities

- MN PUC approved use of externalities in resource decisions in 1993, based on damage function approach
 - Relatively minor impact, use in analysis and in base case
 - Carbon set at < \$5 MT, adjusted for inflation
- Ongoing Activities
 - Stakeholders seeking updates to externality values - motion filed in MN PUC Docket No. E-999/CI-00-1636, pursuant to MN Stat. §216B.2422, subd. 3
 - Commission held proceeding relating to regulatory risk associated with climate change (Estimate of the Costs of Future Carbon Dioxide Regulation on Electric Generation, pursuant to MN Stat. §216H.06); MN PCA also involved; future action likely dependent on pending proposed rulemakings from US EPA

Questions Raised by Stakeholder Comments

- What standard for inclusion applies to (which) environmental value?
- Should the Department consider life-cycle costs or fuel-related costs?
- What are the risks of unintended consequences?
- What course is appropriate in the face of disagreements over data?
- Greenhouse gases - what consideration is appropriate?
- Other: Sub-categorization, additive treatment, and recognition of social benefits

Other Stakeholder Concerns about Using Environmental Values

- Impacts on use of existing generation
- Generally higher costs for electricity creating opportunity costs related to other uses of money

Stakeholder Comments Regarding Potential Double-Counting Issues

- RECs and M-RETS
- RPS Compliance
- Environmental Compliance
- Environmental Regulatory Risk
- Water use

Proposals/Ideas for Setting an Environmental Value

- REC prices
- Federal Social Cost of Carbon
- Minnesota Externality Values
- Minnesota PUC Costs of Future CO₂ Regulation
- Combinations of 1 or more of the above

Additional Environmental Values Suggested by Stakeholders

- Avoided health impacts
- Reduced water usage
- Avoided land use and impacts